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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,448	10/29/2003	Charles Pence	20737.001	6007

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WHITAKER, CHALK, SWINDLE & SAWYER, LLP  
3500 CITY CENTER TOWER II  
301 COMMERCE STREET  
FORT WORTH, TX 76102-4186

EXAMINER


SZUMNY, JONATHON A

ART UNIT	PAPER NUMBER
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3632

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/696,448	<b>Applicant(s)</b> PENCE, CHARLES 	
	<b>Examiner</b> Jon A Szumny	<b>Art Unit</b> 3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 16-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/29/03</u> | 6) <input type="checkbox"/> Other: _____  |

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This is the first office action for application number 10/696,448, Method and Apparatus for Supporting a Thin, Rigid Panel, filed on October 29, 2003.

*Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, drawn to a support arm assembly, classified in class 248, subclass 354.3.
- II. Claims 16-26, drawn to a method of stabilizing a thin panel utilizing a support arm assembly, classified in class 4, subclass 614.

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process could easily be practiced with another materially different product, such as a bent bar with threaded ends and nuts thereon. Alternatively, the second end of the support bar of the present invention could first be attached to the fixed mounting surface before the first end of the support bar is attached to the thin panel.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Stephen Moscher on November 10, 2004 a provisional election was made with traverse to prosecute the invention of group I, claims

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1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### *Information Disclosure Statement*

Receipt is acknowledged of Form PTO-1449, Information Disclosure Statement, which has been reviewed by the Examiner.

### *Drawings*

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 137 in figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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### *Specification*

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The disclosure is objected to because of the following informalities:

In line 1 of the abstract, "is disclosed" should be removed.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the applicant must make it clear whether the subcombination of "a support arm assembly for stabilizing...a... panel" or the combination of the support arm assembly *and* the panel is intended to be the invention. The preamble states the former, but then the combination is claimed in lines 5-6 ("that is substantially equal to a

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predetermined angle between the thin panel..."). For instance, stating --that is *adapted to be equal*...-- would recite the subcombination. For the purposes of this office action, the Examiner will assume the subcombination is the invention.

Claim 9 recites the limitation "the threads around the perimeter of the first mounting plate" in lines 4-5. Claim 10 recites "the first diameter of the first mounting plate" in line 3. There is insufficient antecedent basis for these limitations in the claims. It appears that "first mounting plate" in claim 10 should be --first cover--, and the Examiner will assume this is so for the purposes of this office action.

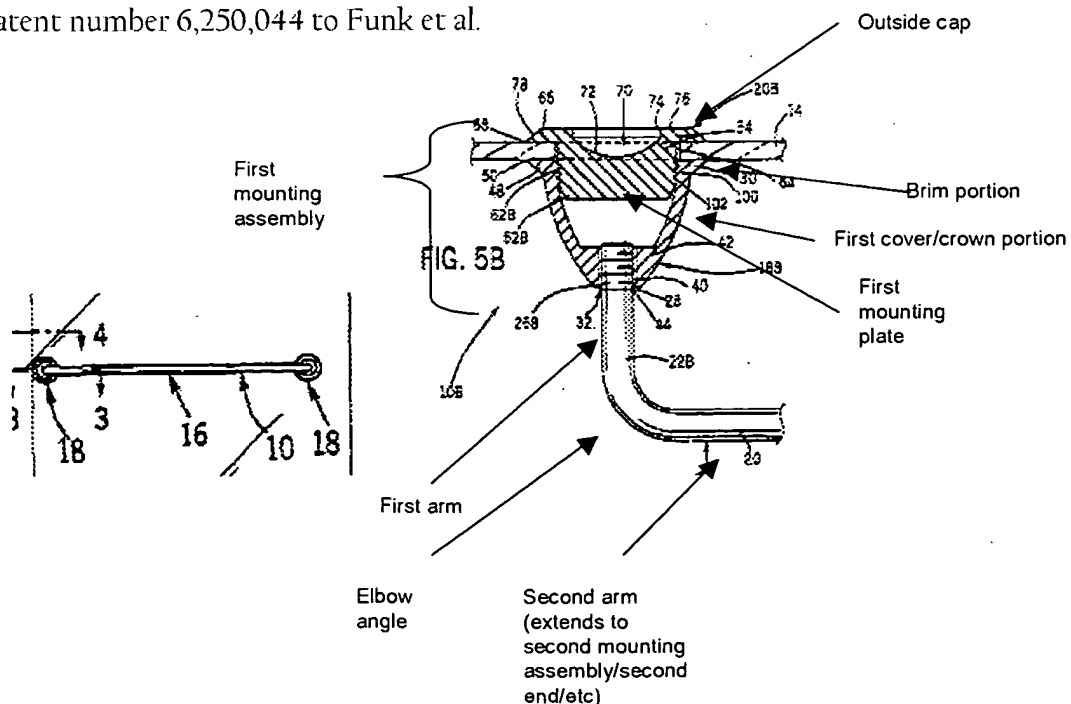
### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 9 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent number 6,250,044 to Funk et al.

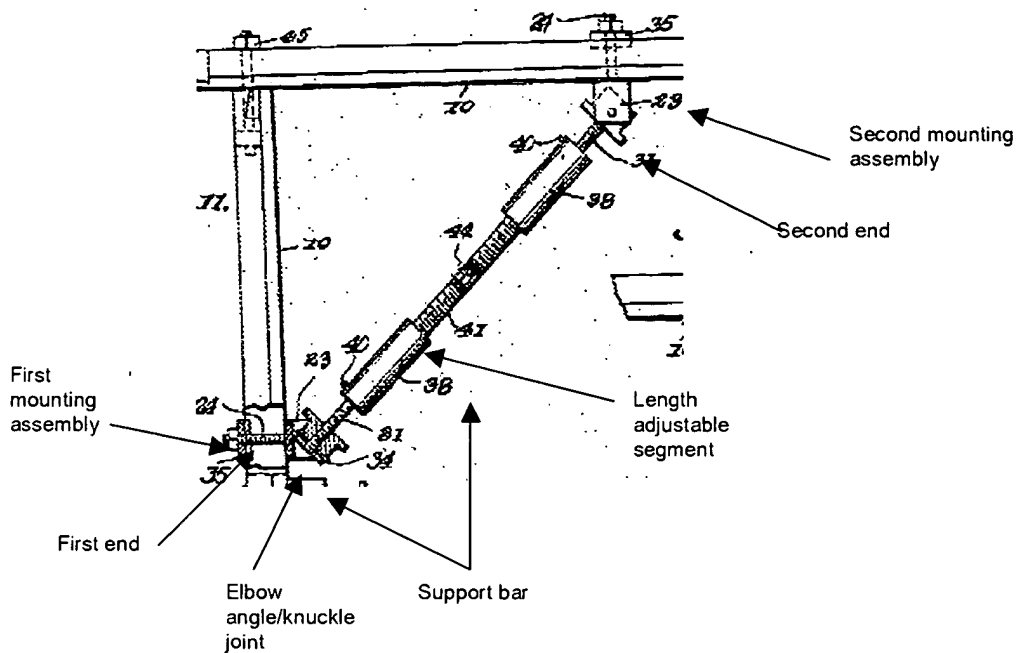


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Funk et al. '044 discloses a support arm assembly (figure 1,5A) comprising a support bar (16) having externally threaded first and second ends (22,24,26) of respective first and second arms (above) joined at an elbow angle (above) nearer the first end of the first arm that is inherently substantially equal to some predetermined angle, a first mounting assembly (above) installed on the first end of the support arm, a second mounting assembly (same as first, other end) installed on the second end of the support bar, wherein the externally threaded first and second end of the respective first and second arms enable adjustment of the first and second mounting assemblies respectively along a longitudinal axis of each of the first and second arms, wherein the support bar is constructed of solid material formed into a single piece support bar, wherein the first mounting assembly comprises a first mounting plate (above), a first cover (above), and an outside cap (above), wherein the first cover comprises a top-hat-shaped cover having a crown portion (above) and a brim portion (above) and formed about a central axis, wherein a plurality of internal screw threads of pitch and diameters to match the threads around the perimeter of the first mounting plate are formed inside the crown portion (near 102), and a hole (near 32) for receiving the first arm therethrough is formed in the crown portion centered on the central axis of the first cover, wherein the predetermined angle is a right angle.

Claims 1, 3, 4, 6 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent number 2,004,462 to Bush.

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Bush '462 discloses a support arm assembly (figure 11) comprising a support bar (above) having externally threaded first and second ends (above) of respective first and second arms (above) joined at an elbow angle (above) nearer the first end of the first arm that is inherently substantially equal to some predetermined angle, a first mounting assembly (above) installed on the first end of the support arm, a second mounting assembly (above) installed on the second end of the support bar, wherein the externally threaded first and second end of the respective first and second arms enable adjustment of the first and second mounting assemblies respectively along a longitudinal axis of each of the first and second arms, wherein the support bar is constructed of solid material formed by two or more pieces joined together at the elbow angle, wherein the elbow angle is an adjustable angle that includes a knuckle joint having a pin at the location of the angle to enable adjustment thereof, wherein the support bar further comprises a



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length-adjustable segment (above) in the second arm of the support bar, wherein the predetermined angle is other than a substantially right angle.

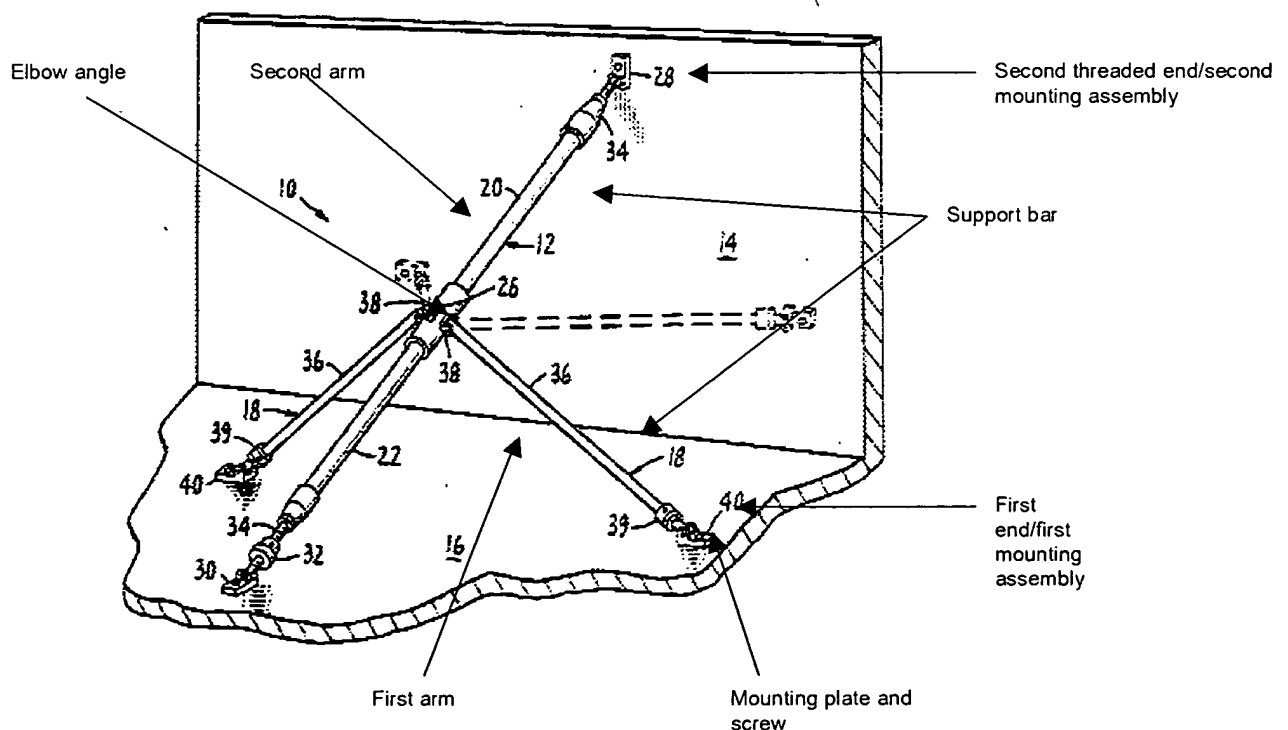
### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent number 4,872,634 to Gillaspy et al.



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Regarding claim 1, Gillaspy et al. '634 discloses a support arm assembly (figure 1) comprising a support bar (above) having a first end and an externally threaded second end (above) of respective first and second arms (above) joined at an elbow angle (above) nearer the first end of the first arm that is inherently substantially equal to some predetermined angle, a first mounting assembly (above) installed on the first end of the support arm, a second mounting assembly (above) installed on the second end of the support bar, wherein the externally threaded second end of the second arm enables adjustment of the second mounting assembly along a longitudinal axis of the second arm. However, Gillaspy et al. '634 fails to specifically teach the first end to be externally threaded such that the first mounting assembly can be adjusted along a longitudinal axis of the first arm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the first end of the first arm to be threaded as in the second end of the second arm so as to provide for superior adjusting means of the first mounting assembly relative to the first arm, in addition to the fact that doing so would simplify the assembly process by providing for a greater uniformity of parts used.

With respect to claim 5, Gillaspy et al. '634 teaches the elbow angle to comprise a knuckle joint with a pivot pin at the location enabling adjustment thereof, but fails to specifically teach the pivot pin to be a set screw. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the assembly of Gillaspy et al. '634 by substituting a set screw for the pivot pin at the knuckle joint since set screws, pins, Allen screws, bolts, etc. are well known for their use

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in the fastening art and the selection of any of these known equivalents to apply an adjusting force would be within the level of ordinary skill in the art.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillaspy et al. '634 in view of U.S. Patent number 5,690,237 to Marzec.

Gillaspy et al. '634 teaches the previous invention, wherein the second mounting assembly comprises a second mounting plate (above) and a mounting screw (above, "drill-in anchor", column 2, lines 49-50), but fails to specifically teach the second mounting assembly to comprise a plurality of mounting screws, and a second cover. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a plurality of mounting screws since doing so would be seen as simply a duplication of parts. See *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Further, Gillaspy et al. '634 fails to specifically teach a second cover.

Nevertheless, Marzec '237 divulges a support arm assembly (figure 6) including an arm with a mounting assembly, wherein the mounting assembly includes a support plate (26), a plurality of mounting screws and a cover (60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a cover on the second mounting assembly of Gillaspy et al. '634 as in Marzec '237 so as to provide for a more aesthetically pleasing assembly.

#### *Allowable Subject Matter*

Claims 8, 10, 12 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 8, the prior art as applied against claim 7 failed to further specifically teach the first mounting plate to comprise a circular disk, having a first diameter, first and second sides and a center, and a round hole formed through the center of the circular disk for receiving the first arm of the support bar, flat on the first side and formed with a raised, hexagonal nut portion axially aligned with the center of the circular disk on the second side; wherein a plurality of external screw threads are disposed around a perimeter of the circular disk and a plurality of internal screw threads matching the pitch and diameters of the external threads on the first end of the support bar are disposed within the bore through the circular disk.

Regarding claim 10, the prior art as applied against claim 7 failed to further specifically teach the outside cap to comprise a machine screw having a threaded shank and a disk-shaped head having a diameter approximately equal to the first diameter of the first cover; wherein screw threads on the threaded shank match a plurality of internal screw threads within a hole formed in the first end of the support bar along the longitudinal axis of the first arm of the support bar.

With respect to claim 12, the prior art as applied against claim 11 failed to further specifically teach the second mounting plate to comprise a cylindrical body portion having an internally threaded axial bore therethrough and a circular flange portion disposed about and unified with a first end of the body portion; wherein a plurality of external screw threads are disposed around a perimeter of the circular flange portion;

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and wherein a plurality of mounting holes are uniformly disposed through the flange portion around and parallel to the axial bore.

With respect to claim 13, the prior art as applied against claim 11 failed to further specifically teach the second cover to comprise a top-hat-shaped cover having a crown portion and a brim portion and formed about a central axis; wherein a plurality of internal screw threads, of pitch and diameters to match the threads around the perimeter of the second mounting plate, are formed inside the crown portion of the first cover, and a hole for receiving the second arm of the support bar therethrough is formed in the crown portion centered on the central axis of the second cover.

### *Conclusion*

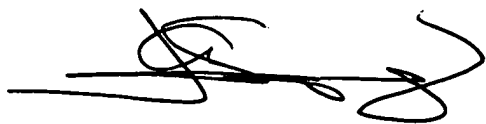
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Confalonieri '798, Lambertini '577, Uccello et al. '910, Hobrecht '058, Smith '619, Cuttriss '252, Romano '462, Salach '489 and De Leon '054 teach various support arm assemblies with threaded ends and mounting assemblies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon A Szumny whose telephone number is (703) 306-3403. The examiner can normally be reached on Monday-Friday 8-4.

The fax phone number for the organization where this application and proceeding are assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

A handwritten signature in black ink, appearing to read 'Jon Szumny', with a stylized flourish at the end.

Jon Szumny  
Patent Examiner  
Technology Center 3600  
Art Unit 3632  
November 15, 2004